

# TA-PROJEKTE

## What a Difference a p(TA) Makes

Policy-Makers, Experts and the Public in Decision-Making on Risky Technologies

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**It is almost a truism that technological innovation does not only hold great promises, but often involves substantial risks and even ethical problems. Thus, the question arises, who is going to decide on such ambiguous technologies in what way. The project CIT-PART studied comparatively the use and impact of participatory technology assessment (pTA) and expert-based technology assessment (TA) in science and technology policy in several EU Member States and organizations such as Austria (AT), Canada (CA), Denmark (DK), the European Commission (EC), Great Britain (GB), The Holy See (VA), Italy (IT), Latvia (LV), The Netherlands (NL), the OECD, Sweden (SE), and Switzerland (CH).**

### 1 Introduction

In contrast to existing comparative studies on pTA (e.g. Bora/Hausendorf 2004; Decker/Ladikas 2004; Joly et al. 2001; Joss/Bellucci 2002), the project CIT-PART compared the use and impact of TA and pTA in the context of the same technology.<sup>1</sup> The main questions addressed in this project were: To what extent was TA and pTA used? Which factors facilitated and constrained pTA? What was the impact of TA and pTA on policy-making? How can pTA increase citizen participation on decision-making?

CIT-PART studied these questions by taking xenotransplantation policies in the 1990s and early 2000s as an example. Xenotransplantation involves the transplantation of cells, tissues and organs from animals to humans. It is representa-

tive of many contemporary technologies in the sense that it is a complex problem, possibly with huge potential benefits, but also risks and ethical challenges. It is therefore potentially controversial in the public.

In order to answer its research questions, in addition to wide-ranging analysis of literature and policy-documents, 135 expert interviews were carried out at the national and international level with policy-makers, experts, stakeholders and representatives of NGOs involved in TA and pTA.

### 2 Findings

#### *Diversity of Policies*

A diversity of xenotransplantation policies exists across Europe. They range from a wait and see position, in which no particular policies were formulated (AT), to permissive ones, which allowed clinical trials following approval by responsible authorities (CH, EC, GB, IT, LV, OECD, VA), and formal and informal moratoria on clinical trials (CA, DK, NL, SE).

#### *Expert Advice Dominates*

Expert TA dominated policy advice on xenotransplantation policies. Only a small minority of governments commissioned pTA to involve the public (CA, CH, NL). In some cases, academics initiated participatory exercises (AT, EC, and GB), however, these had no direct impact on decision-making in xenotransplantation policies.

#### *Experts and Civil Servants are Critical Actors*

In almost all of our cases, civil servants and experts were the most important actors in policy development (Biegelbauer et al. 2013). Elected politicians only contributed to policy-making in a few countries (CA, CH, DK, NL, SE). Despite the fact that reports repeatedly mentioned ethical issues as being of key importance, ethicists – either in the form of national ethics committees or single experts involved in TA and pTA – played a lesser role and became strongly involved in

only a few cases (CA, GB, and VA). NGOs also took part in the political process in only a few countries (CA, CH, GB, and NL). Particularly animal welfare organizations faced difficulties to participate. In some cases, there was almost no public involvement beyond information being made public (AT, IT, LV, OECD, VA). By contrast, industry and science were able to considerably contribute as stakeholders to policy development. Citizens only became actively involved in xenotransplantation policies in a minority of countries (CA, CH, and NL).

#### *Diversity of Framing, but Organ Shortage and Risk Often Dominate*

First, xenotransplantation was not a controversial topic or the subject of hot debate in all cases.

- In Austria and Latvia there was no debate at all.
- In many cases xenotransplantation did not give rise to serious conflicts and was handled as “business as usual” (DK, EC, IT, OECD, SE, VA).
- In the Netherlands and Switzerland a situation of managed tension arose.
- However, in Canada and Great Britain, xenotransplantation was discussed in the context of a serious crisis of trust in government regulation.

Second, framing of xenotransplantation as a topic was contingent and varied between cases.

- In most countries the topics of organ shortage and risk dominated the discussion.
- In some cases xenotransplantation was discussed in the context of national economic competitiveness (CH, EC, GB, LV, OECD, and SE).
- Less frequently ethical issues (CA, CH, SE, and VA) and animal welfare (CH, EC, NL, and VA) were critical and they became significant topics only in a few cases.
- In two cases trust in government (CA, GB) became critical.
- In one country xenotransplantation gave rise to struggles for competencies between parliament and government (NL).

#### *Weak Role of the Public*

The public was mostly involved in the weakest possible form, i. e. through surveys (in all cases except CH, LV, OECD, and VA). Additionally, with the exception of Austria, almost all countries informed the public in one way or another (Einsiedel et al. 2011). This was done to varying degrees, ranging from full-blown information campaigns (CA, CH, NL, SE) to simply publishing reports online (DK, EC, IT, OECD, VA). In a few cases the public was consulted. The intensity of consultation varied and was found to be very strong in some cases (CA, CH, GB, SE), strong in others (SE), or rather weak (EC, OECD). Again, the public was only involved in pTA exercises in CA, CH, and NL.

#### *Little Direct but a Variety of Broader Impact of pTA*

Although policy-makers approved – in all the cases in which pTA was carried out – of both the pTA itself and its results, no unambiguous direct impact of these exercises could be established. In the Netherlands, the results of the pTA were available only after xenotransplantation policies were adopted and the organizers of the pTA did not have concrete plans for feeding them into policy-making. As it turned out, pTA results and official xenotransplantation policies were congruent.

The same was true for Switzerland, where there was again an agreement between pTA results and government policies, which were determined before the end of the participatory exercise. In the Canadian case, it was hard to pinpoint a direct impact of the consultation exercise because the government did not make an official statement on its xenotransplantation policies, in accordance with the public opinion, thereafter no clinical trials were carried out.

However, adopting a perspective on impact assessment that goes beyond the mere handing over of a final report, all three pTAs had an impact on the development of xenotransplantation regulation. The pTAs contributed to creating public awareness of the issue and to a (re)configuration of the relationship between relevant actor groups. pTAs also played a part in the definition

of xenotransplantation as an issue by legitimizing and giving authority to claims made and to actor positions in the debate and regulatory procedures. In all three cases, pTA exercises were by and large considered legitimate and meaningful ways to gain knowledge and to involve the public in a debate about science and technology policy (Griessler 2012; Loeber et al. 2011).

#### *Varied Impact of TA as well*

Difficulties in the integration of findings from assessment studies into policy-making are not restricted to pTA. Expert TA also faced difficulties in directly impacting on the regulation process. While in three of our cases the TA exercises had a strong impact on policy-making (DK, GB, and OECD), in another two cases direct impact was weaker or at best “mixed” (EC, VA). However, in three cases there was no direct impact on policy-making at all (IT, LV, SE). Important factors that co-determined a study’s impact were the kind of institution in which an advisory body is located, its mandate as advisory or regulatory body, the extent to which its connection to policy-making was institutionalized, and its reputation as a competent and independent organization. Moreover, the technical development of the policy issue and its framing in political and broader public debate played a role.

#### *Facilitating Factors*

The facilitating factors included existing traditions that pTA can build on, i. e. commissions involving participatory elements, adult education, direct democracy, consultation. They also included existing practices of accountability and openness, coordination with responsible policy-making authorities and departments, combinations of various methods (e.g. surveys, emails, plays, consensus conferences) and the involvement of the wider social and political context in the organization of pTA and dissemination of its results as well as the involvement of antagonistic groups in the pTA.

#### *Constraining Factors*

As the final finding the following factors may be mentioned. When a topic is not perceived as political at all because it is only framed as a scientific issue – excluding or postponing e.g. questions of collective risk, ethics, human rights, politics and economics – or considered as a matter of individual choice or when the public does not consider itself to be a legitimate actor vis-à-vis policy-makers and experts pTA was endangered. Constraining factors also included case-by-case decision-making on individual clinical trials, which undermine an understanding of xenotransplantation as a fundamentally political issue, traditions of paternalism, neo-corporatism and strong and exclusive links between elites from science and the civil service that exclude the public and a lack of infrastructure and funding.

#### **Note**

- 1) The project “Impact of Citizen Participation on Decision-Making in a Knowledge Intensive Policy Field” (CIT-PART) was active from January 2009 to June 2012. It was funded by the European Commission within the 7th Framework Programme for Research – Socioeconomic Sciences and Humanities (Contract Number: SSH-CT-2008-225327). We want to thank all partners in this research for their stimulating cooperation, i. e. Alexander Lang, Ingrid Metzler, Anna Pichelstorfer, Karina Weitzer (Institute for Advanced Studies); Edna Einsiedel, Mavis Jones, Meaghan Brierley (University of Calgary); Janus Hansen (Copenhagen Business School); Aivita Putnina and Jekatarina Kaleja (University of Latvia); Anne Loeber and Wytke Versteeg (University of Amsterdam), Susanne Lundin and Kristofer Hansson (University of Lund); Nik Brown and Sian Beynon-Jones (University of York). For more information on the project see: <http://www.cit-part.at>.

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## Internationale Fachportale für Technikfolgenabschätzung

Brauchen wir eines oder sogar mehrere?

von Michael Nentwich, ITA Wien, und Ulrich Riehm, ITAS

**Nach intensiven Vorbereitungen im Rahmen des EU-Projekts PACITA ist das neue internationale TA-Portal seit Anfang Oktober 2012 online.<sup>1</sup> Im selben Monat fand auch der Auftaktworkshop eines von der Deutschen Forschungsgemeinschaft (DFG) geförderten Projekts des Netzwerks Technikfolgenabschätzung (NTA) statt, das sich ebenfalls zum Ziel gesetzt hat, ein Fachportal für Technikfolgenabschätzung (TA) zu realisieren. Dieser Beitrag vergleicht die beiden Vorhaben, stellt sie in einen historischen Kontext und diskutiert die Frage, welche Rolle diese in der TA-Community spielen können.**

### 1 Die Herausforderungen

TA hat sich seit den 1960er Jahren in Deutschland (sowie im europäischen Ausland) etabliert (Grunwald 2010). Die Palette der Institutionen, die TA betreiben, reicht von einzelnen Lehrstühlen über Ingenieur- und Beratungsbüros sowie gemeinnützigen Vereinen bis hin zu auf TA spezialisierten großen Forschungsinstituten und Beratungseinrichtungen. TA als wissenschaftliche Politikberatung ist auf politische Entscheidungsprozesse ausgerichtet, wendet sich aber auch an die Öffentlichkeit und bleibt stets rückgebunden an die Wissenschaft. Gegenwärtig ist ein Trend zur Akademisierung der TA festzustellen. Er konkretisiert sich in der Etablierung von TA-spezifischen Lehrveranstaltungen an Universitäten und Hochschulen (Bora/Mölders 2009), in der Durchführung wissenschaftlicher Tagungen (etwa NTA1–NTA5 ff., TA'01–TA'12 ff.) und der Herausgabe wissenschaftlicher Zeitschriften (z. B. die Open-Access-Zeitschriften „Technikfolgenabschätzung – Theorie und Praxis“ sowie „Poiesis & Praxis“). Der intensiveren Kommunikation und Kooperation nach innen sowie der besseren Sichtbarkeit nach außen diente die Gründung des „Netzwerks TA“